**DOCKET NO.:** RUCC-0046 (98-0087US) PATENT

**Application No.:** 09/743,840

Office Action Dated: August 12, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1. (Currently amended) A method of producing a transgenic turfgrass plant, comprising the steps of:

- (a) culturing <u>embryogenic</u> organogenic tissue from <u>seeds of</u> a turfgrass plant on a medium that promotes de-differentiation of the tissue, to produce regenerable callus tissue;
- (b) inoculating the callus tissue with Agrobacterium carrying at least one vector for transformation, the vector comprising virB, virC and virG virulence genes from plasmid pSB1 or pSB4, in which vector is inserted a heterologous DNA construct and a selectable marker conferring antibiotic resistance to transformed cells, wherein the DNA construct and selectable marker are operably linked to a promoter from a monocotyledonous species, wherein the inoculating comprises mixing the callus tissue with the Agrobacterium pre-incubated with acetosyringone, under conditions permitting the Agrobacterium to infiltrate the callus tissue, thereby forming Agrobacterium-infiltrated callus tissue;
- (c) co-culturing the *Agrobacterium*-infiltrated callus tissue under conditions that enable the *Agrobacterium* vector to transform cells of the *Agrobacterium*-infiltrated callus tissue;
- (d) selecting transformed cells by culturing the *Agrobacterium*-infiltrated callus tissue on a selection medium comprising an antibiotic, wherein the transformed cells are resistant to the antibiotic and are selected by their growth in the presence of the antibiotic; and
  - (e) regenerating a transformed turfgrass plant from the transformed cells.
- 2. (Original) The method of claim 1, wherein the turfgrass is a species selected from the group consisting of creeping bentgrass, tall fescue, velvet bentgrass, perennial ryegrass, hard fescue, Chewings fescue, strong creeping fescue, colonial bentgrass and Kentucky bluegrass.
  - 3. Canceled.

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4. Canceled.

5. (Original) The method of claim 1, wherein the promoter is selected from the

group consisting of maize ubiquitin gene promoters, rice actin gene promoters, maize Adh 1

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gene promoters, rice or maize tubulin (Tub A, B or C) gene promoters, and alfalfa His 3 gene

promoters.

6. (Previously presented) The method of claim 1, wherein the selectable marker

gene confers hygromycin resistance on transformed cells.

7. Canceled.

8. Canceled.

9. Canceled.

10. (Currently amended) The method of claim 1, wherein the vector transgenic

turfgrass plant of claim 8, which comprises a transgene selected from the group consisting of:

(a) a gene encoding glucose oxidase;

(b) a gene encoding citrate synthase;

(c) a gene encoding  $\Delta$ -9 desaturase from Saccharomyces cerevisiae or

Cryptococcus curvatus;

(d) a gene encoding  $\Delta$ -11 desaturase;

(e) a gene encoding a plant homolog of the neutrophil NADPH oxidase;

(f) a gene encoding bacteriopsin from Halobacterium halobium; and

(g) a gene encoding pokeweed antiviral protein.

11-21. Canceled.